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EXAMINER

CREPEAU, JONATHAN

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Response to Arguments

Applicant's arguments filed 2/13/09 have been considered but they are not persuasive. First, it is noted that since the declaration filed on 2/13/09 has not been entered or considered (see item 8 of present action), any arguments relating to the declaration have not been considered. However, with regard to the other arguments presented, the following remarks are made.

Applicants state that the batteries of present invention and the '789 patent have been subjected to a "nail" or "needle" test, whereby the present invention is asserted to show unexpected results. However, it is noted that there appear to be several differences in the compared batteries, and as such, it the source of the alleged improvement cannot be ascertained. As an example, the tested battery of the '789 patent uses LiAlCl_4 , whereas no mention of that compound is made in the Examples of the present application. Further, the batteries shown in the present Examples are not commensurate in scope with the claims. The first battery uses 2% LiF, which material is not recited in claim 1. Additionally, SiC is used as the solid material but is also not recited in claim 1. Further, the volume filling proportion is 60%, whereas the claimed lower endpoint is 40%. A showing at or near 40% is believed to be necessary to show the unexpected improvement of the present invention.

Applicants further state that "simply substituting the fibrous carrier materials of the '789 patent with a carrier material in particulate form [...] would not result in a solid volume proportion as high as 40%." First, it is noted that the '789 patent is not specifically limited to fibrous carrier materials. The disclosure at column 5, line 11 would indicate to a skilled artisan

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that any kind of solid material "matrix" could be used as porous structure, so long as it is not a "loose filling." Therefore, the use of compacted particles is seen as obvious. Further, the disclosure at column 5, line 5 that "the structure in which the salt is contained should not have too small pores" is noted; however, it is believed that this disclosure is not inconsistent with the claimed invention's lower limit of 40 vol% of the solid particles in the porous structure. As stated above, the porous structure of the '789 patent is not limited to fibers, and it would be well within the skill of the art to design a compressed particulate porous layer that has a solid volume percentage of at least 40%, while still allowing the pores to be large enough to contain salt and active material according to the principles of the '789 patent. As such, the '789 patent is not believed to "teach away" from the claimed invention.